POWERWARE® 5125 Tower

User's Guide

1000VA, 1500VA, 2000VA, 2200VA

POWERWARE®

www.powerware.com.au

POWERWARE

POWERWARE® 5125

1000, 1500, 2000 & 2200VA

User's Guide

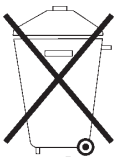
Special Symbols

The following are examples of symbols used on the UPS to alert you to important information.

RISK OF ELECTRIC SHOCK - Indicates that a risk of electric shock is present and the associated warning should be observed.

CAUTION: REFER TO OPERATOR'S MANUAL - Refer to your operator's manual for additional information, such as important operating and maintenance instructions.

RJ-45 RECEPTACLE - This receptacle provides network interface connections. Do not plug telephone or telecommunications equipment into this receptacle.



This symbol indicates that you should not discard the UPS or the UPS batteries in the trash. The UPS may contain sealed, lead-acid batteries. Batteries must be recycled.

5125Manual.qxd OMM5125TRev3
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Safety Instructions

IMPORTANT SAFETY INSTRUCTIONS!
SAVE THESE INSTRUCTIONS!

This User Guide contains important instructions for your Powerware 5125 that must be followed during installation and maintenance of the UPS and batteries.

CAUTION!

Whenever the Powerware 5125 is “On,” there may be dangerous voltage present at the unit’s outlets. This is true because the unit’s battery supplies power even if the unit is not plugged into the wall outlet. The unit contains dangerous voltages.

To reduce the risk of electric shock, install in a temperature-controlled and humidity-controlled indoor area free of conductive contaminants.

The power supply cord is intended to serve as the disconnect device. The socket-outlet shall be near the equipment and shall be easily accessible.

With the exception of the user-replaceable batteries, all servicing of this equipment must be performed by qualified service personnel.

Before maintenance or repair, all connections must be removed. Before maintenance, repair, or shipment, the unit must be completely switched off and unplugged or disconnected.

The installation and use of this product must comply with all national, federal, state, municipal, or local codes that apply. For assistance, call Powerware Service or your local Powerware office.

If the Powerware 5125 has been damaged during shipment, call your vendor immediately.

If the Powerware 5125 is stored, the batteries should be recharged every 6 months. *If stored above 25° Celsius, recharge the batteries more often.*

1.0 Powerware 5125 - One of the Best!

The Powerware 5125 uninterruptible power system (UPS) protects your sensitive electronic equipment from basic power problems such as power failures, power sags, power surges, brownouts, and line noise.

Power outages can occur when you least expect it and power quality can be erratic. These power problems have the potential to corrupt critical data, destroy unsaved work sessions, and damage hardware - causing hours of lost productivity and expensive repairs.

With the Powerware 5125, you can safely eliminate the effects of power disturbances and guard the integrity of your equipment. The Powerware 5125 was designed for critical applications such as PC's, servers, workstations, and telecommunications equipment. Figure 1 shows the Powerware 5125 UPS with an optional Extended Battery Module (EBM)

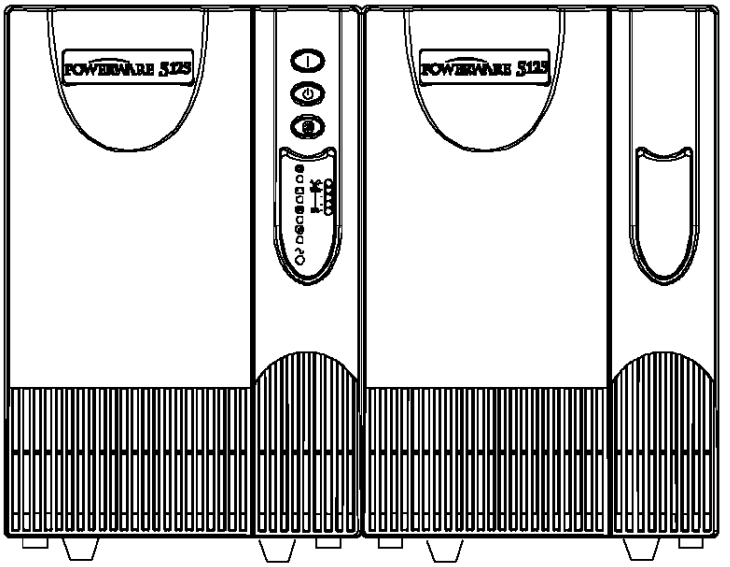


Figure 1. The Powerware 5125

Providing outstanding performance and reliability, the Powerware 5125's unique benefits include the following:

- Advanced Battery Management Plus (ABM Plus™) doubles battery service life, optimises recharge time and provides a warning before the end of useful battery life.
- Buck and Double Boost regulation ensures consistent voltage to your load by correcting voltage fluctuations without using battery power.
- Hours of extended runtime with up to four EBMs.
- Hot-swappable batteries simplify maintenance by allowing you to replace batteries safely without powering down the critical load.
- Start-on-battery capability allows you to power up the UPS even if utility power is not available.
- Advanced power management with the Software Suite CD for graceful shutdowns and power monitoring.
- Sequential shutdown and load management through separate receptacle groups, called load segments.
- Network Transient Protector guards your network communications equipment from surges.
- Optional X-Slot™ modules provide enhanced communication capabilities for increased power protection and control.

2.0 Installation

This section explains:

- UPS installation
- UPS rear panels

Installing the UPS

The following steps explain how to install the UPS. Figure 2 shows a typical installation only. See “UPS Rear Panels” on Page 7 for the rear panel of each model.

NOTE Do not make unauthorised changes to the UPS, otherwise damage may occur to your equipment and void your warranty

1. If installing an optional EBM, continue to Step 2; otherwise skip to Step 4
2. Plug the EBM cable into the battery connector on the UPS rear panel (See Figure 2).
3. If a second EBM is to be installed, plug the EBM cable of the second cabinet into the battery connector on the first EBM. Up to four EBMs may be connected to the UPS.

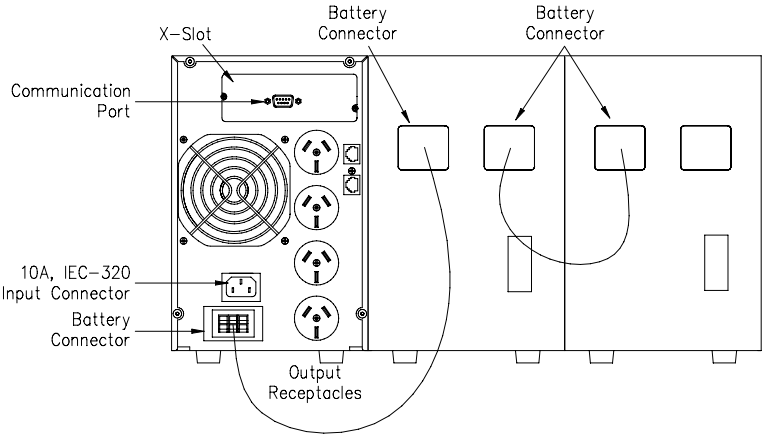


Figure 2. Typical Installation with Two EBMs

4. If you are installing power management software, connect your computer to the UPS communication port using the supplied communication cable.

5. Plug the detachable UPS power cord into the input connector on the UPS rear panel.

6. Plug the UPS power cord into a power outlet. The front panel indicators cycle through a startup sequence while the UPS conducts a self-test.

   When the self-test is complete, the ~ indicator flashes, indicating the UPS is in Standby mode with the equipment offline. If the alarm beeps or a UPS alarm indicator stays on, see Table 9 on Page 25.

7. Plug the equipment to be protected into the appropriate UPS output receptacles (see page 15 for more information on load segments).

   DO NOT protect laser printers with the UPS because of the exceptionally high power requirements of the heating elements.

8. Press and hold the ON button until you hear the UPS beep (approximately one second). The ~ indicator stops flashing and the bar graph indicators display the percentage of load being applied to the UPS

   The UPS is now in Normal mode and supplying power to your equipment.

NOTE The batteries charge to 90% capacity in approximately 3 hours. However, it is recommended that the batteries charge for 24 hours after installation or long-term storage.

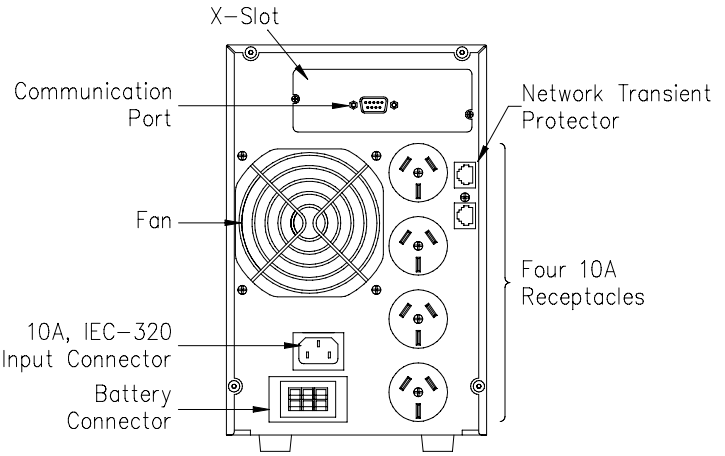


Figure 3. PW51251000A and PW51251500A Rear Panel

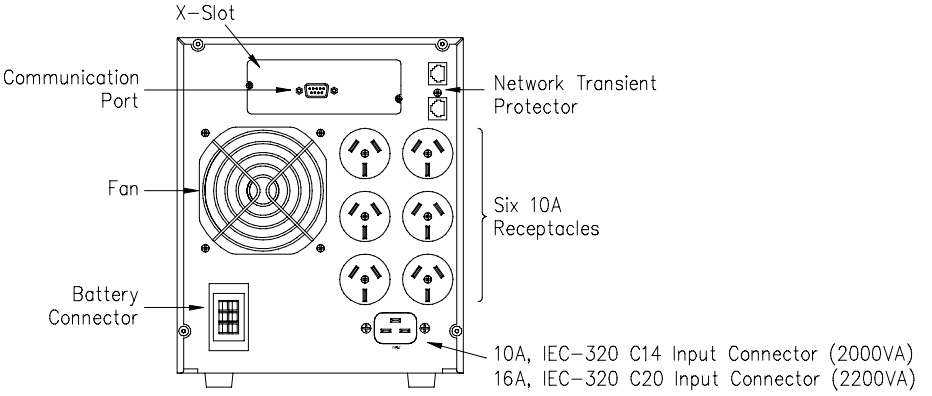


Figure 4. PW51252000A and PW51252200A Rear Panel

3.0 Operation

This section describes:

- Operating modes
- Turning the UPS on and off
- Starting the UPS on battery
- Initiating the self-test

Operating Modes

Powerware 5125's front panel indicates the UPS status through the UPS indicators. Figure 5 shows the UPS front panel indicators and controls.

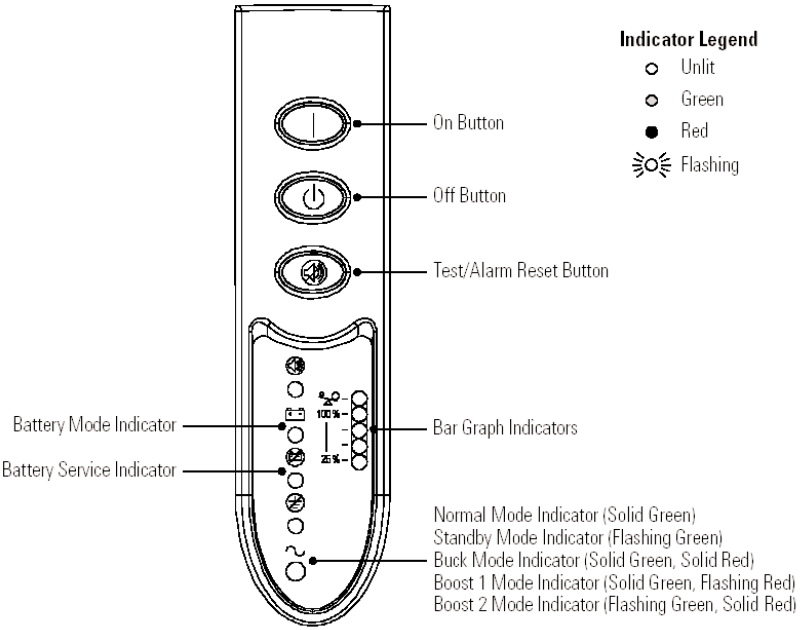


Figure 5. UPS Front Panel

Normal Mode

During normal mode the ~ indicator illuminates and the front panel displays the percentage of UPS load capacity being used by the protected equipment (see Figure 6). The UPS monitors and charges the batteries as needed and provides power protection to your equipment.

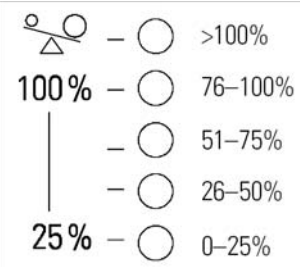


Figure 6. Load Level Indicators

When all the bar graph indicators and the indicator are illuminated, power requirements exceed UPS capacity; see Page 25 for more information.

Buck and Double Boost Mode

With the Buck and Double Boost feature, the UPS accepts a wide input voltage range (-30%/_+20% of nominal) and provides consistent, clean voltage to your equipment. The UPS operates normally from utility power and alerts you of the voltage fluctuations. The ~ indicator alternates between green and red while in Buck, Single Boost or Double Boost mode as shown in Figure 7.

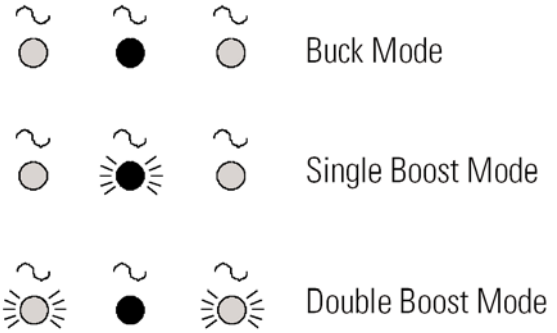


Figure 7. Buck and Double Boost Indicators

Battery Mode

When the UPS is operating during a power outage, the alarm beeps once every four seconds and the indicator illuminates. When the utility power returns, the UPS switches to Normal mode operation while the battery recharges.

If battery capacity becomes low while in Battery mode, the indicator flashes and the alarm beeps twice every two seconds. Immediately complete and save your work to prevent data loss and similar difficulties. When utility power is restored after the UPS shuts down, the UPS automatically restarts.

Standby Mode

When the UPS is turned off and remains plugged into a power outlet, the UPS is in Standby mode. The ~ indicator flashes and the bar graph indicators are off, indicating that power is not available from the UPS output receptacles. The battery recharges when necessary.

Sleep Mode

If the UPS is on battery for approximately five minutes and supporting a small electrical load (≤10%), the UPS shuts down the load. After three minutes in Sleep mode, the UPS initiates a shutdown warning (two beeps every two seconds). This feature conserves battery power. To enable this feature, contact your service representative.

Turning the UPS On

After the UPS is connected to a power outlet, it conducts a self-test and enters Standby mode. To turn on the UPS, press and hold the On button until you hear the UPS beep (approximately one second). The ~ indicator stops flashing and the bar graph indicators display the percentage of load being applied to the UPS.

Starting the UPS on Battery

NOTE Before using this feature, the UPS must have been powered by utility power at least once.

To turn on the UPS without using utility power, press and hold the On button for at least four seconds. The UPS supplies power to your equipment and goes into Battery mode.

Turning the UPS Off

To turn off the UPS, press and hold the Off ⏻ button until the long beep ceases (approximately five seconds). The ~ indicator begins to flash and the UPS remains in Standby mode until you unplug the UPS from the power outlet.

Initiating the Self-Test

NOTE The batteries must be fully charged to perform the self-test.

Press and hold the button for three seconds to initiate the self-test. During the test, individual indicators illuminate as various parts of the UPS are checked. If the alarm beeps or a UPS alarm indicator stays on, see Table 9 on Page 25.

4.0 Additional UPS Features

This section describes:

- X-Slot modules
- Network Transient Protector
- Load Segments

X-Slot Modules

X-Slot modules allow the UPS to communicate in a variety of networking environments and with different types of devices. The Powerware 5125 is factory-installed with a Single-Port module and is compatible with any X-Slot module, including:

- Multi-Server Module - has six serial communication ports that can communicate with UPSs, terminals, computers and modems
- ConnectUPS™-MX SNMP Module - has Ethernet and SNMP capabilities.
- ConnectUPS-X SNMP/WEB Adaptor - has SNMP capabilities as well as monitoring through a web browser interface.
- USB Module - connects to a USB port on your computer.

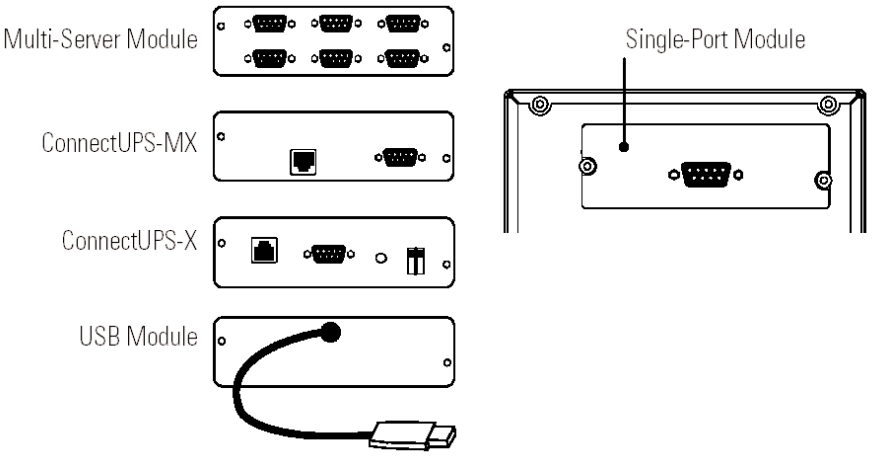


Figure 8. Optional X-Slot Modules

Single-Port Modules

The Powerware 5125 is factory installed with a Single-Port Module.

To establish communications between the UPS and a computer, connect your computer to the UPS communication port using the supplied communication cable.

When the communication cable is installed, power management software can exchange data with the UPS. The software polls the UPS for detailed information on the status of the power environment. If a power emergency occurs, the software initiates the saving of all data and an orderly shutdown of the equipment.

The cable pins are identified in Figure 9 and the pin functions are described in Table 1.

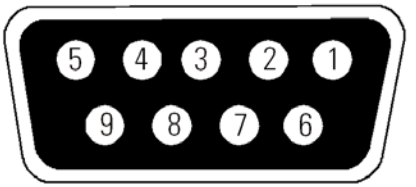


Figure 9. Communication Port

Table 1. Communication Port Pin Assignment

Pin Number	Signal Name	Function	Direction from the UPS
1	Low Batt	Low Battery relay contact	Out
2	RxD	Transmit to external device	Out
3	TxD	Receive from external device	In
4	DTR	PnP (Plug and Play) from external device (tied to Pin 6)	In
5	GND	Signal common (tied to chassis)	-
6	DSR	To external device (tied to Pin 4)	Out
7	RTS	PnP from external device	In/Out
8	AC Fail	AC Fail relay contact	Out
9	Power Source	+V (8 to 24 Volts DC Power)	Out

Network Transient Protector

The Network Transient Protector, shown in Figure 10, is located on the rear panel and has jacks labelled IN and OUT. This feature accommodates a single RJ-45 (10BaseT) network connector.

Connect the input connector of the equipment you are protecting in the jack labelled IN. Connect the output connector to the jack labelled OUT.

Do not connect or attempt to connect this connector to telephone circuits.

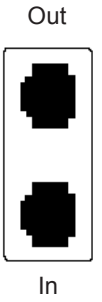


Figure 10 Network Transient Protector

Load Segments

Load segments are sets of receptacles that can be controlled by power management software, providing an orderly shutdown and startup of your equipment. For example, during a power outage, you can keep key pieces of equipment running while you turn off other equipment. This feature allows you to save battery power. See your power management software manual for details.

NOTE If the power management software is not used, the individual load segments cannot be controlled.

The following figures show the load segments for each UPS.

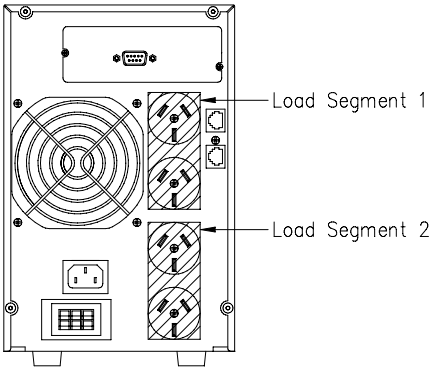


Figure 11. 1000VA and 1500VA Load Segments

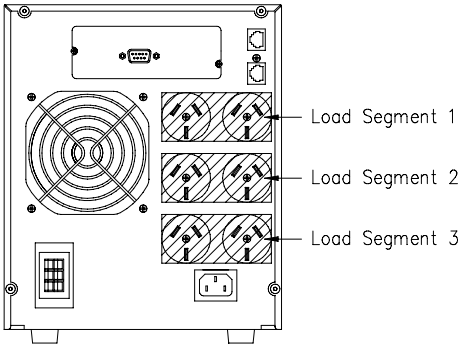


Figure 12. 2000VA and 2200VA Load Segments

5.0 UPS Maintenance

This section explains how to:

- Care for the UPS and batteries
- Replace the batteries
- Test new batteries
- Recycle used batteries

UPS and Battery Care

For the best preventive maintenance, keep the area around the UPS clean and dust-free. If the atmosphere is very dusty, clean the outside of the system with a vacuum cleaner.

For full battery life, keep the UPS at an ambient temperature of 25^{o}C.

Storing the UPS and Batteries

If you store the UPS for a long period, recharge the battery every 6 months by plugging the UPS into a power outlet. The batteries charge to 90% capacity in approximately 3 hours. However, it is recommended that the batteries charge for 24 hours after long-term storage.

Check the battery recharge date on the shipping carton label. If the date has expired and the batteries were never recharged, do not use the UPS. Contact your service representative.

When to Replace Batteries

When the indicator flashes and there is a continuous audible alarm, the batteries may need replacing. Conduct a self-test by pressing and holdng the button for three seconds. If the indicator stays on, contact your service representative to order new batteries.

Replacing the Batteries

NOTE: DO NOT DISCONNECT the batteries while the UPS is in Battery Mode

With the hot-swappable battery feature, UPS batteries can be replaced easily without turning the UPS off or disconnecting the load.

If you prefer to remove input power to change the battery:

1. Press and hold the Off ⏻ button until the long beep ceases (approximately five seconds), then unplug the UPS.
2. Wait 60 seconds while the internal processor shuts down before you disconnect the battery.

Consider all warnings, cautions and notes before replacing batteries.

WARNING

- Batteries can present a risk of electrical shock or burn from high short-circuit current. The following precautions should be observed. 1) Remove watches, rings or other metal objects; 2) Use tools with insulated handles; 3) Do not lay tools or metal parts on top of batteries.
- ELECTRIC ENERGY HAZARD. Do not attempt to alter any battery wiring or connectors. Attempting to alter wiring will cause injury.

How to Replace Extended Battery Modules

Use the following procedure to replace EBMs:

1. Unplug the EBM cable from the UPS.
2. Replace the EBM. See “Recycling the Used Battery” on Page 20 for proper disposal.
3. Plug the new EBM into the UPS as shown in Figure 13.
4. For additional EBMs, plug the EBM cable of the second cabinet into the battery connector on the first EBM.

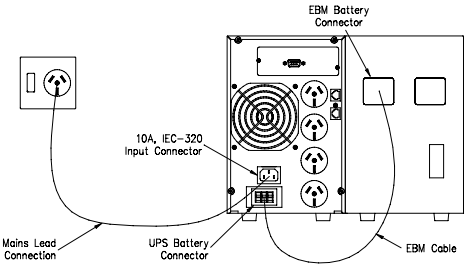


Figure 13. EBM Connections

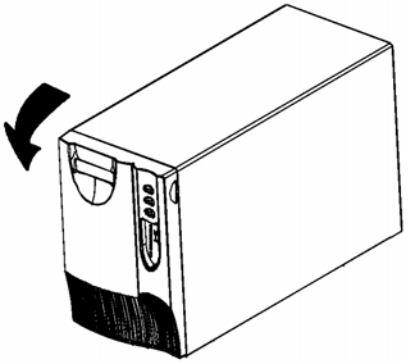
How to Replace Internal Batteries

CAUTION

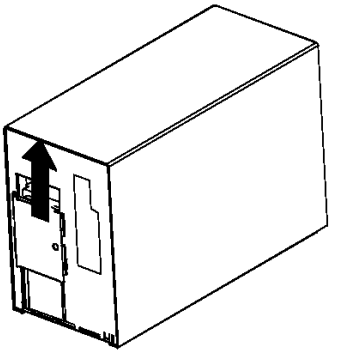
Pull the battery out onto a flat, stable surface. The battery is unsupported when you pull it out of the UPS.

Use the following procedure to replace internal batteries:

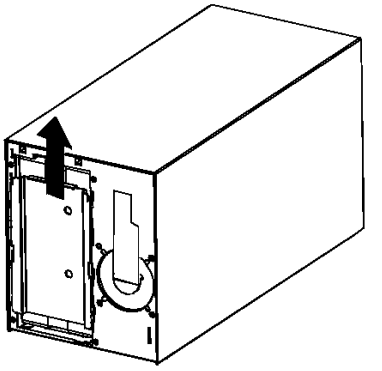
1. Remove the UPS front panel by pulling the top.



2. Slide up and remove the metal battery cover.

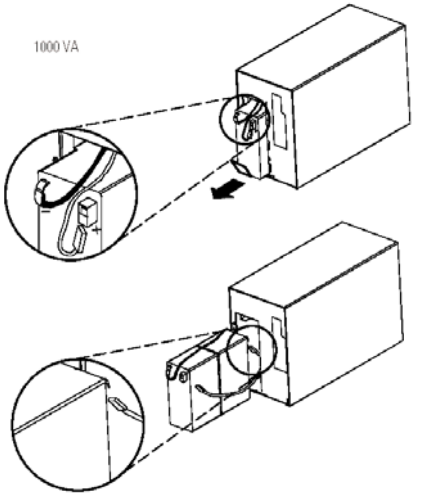


1000VA

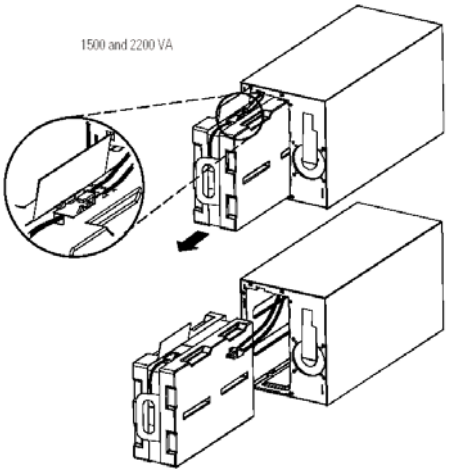


1500, 2000 and 2200VA

3. **1000VA units.** Disconnect the red battery cable on the front of the battery. Pull the battery out onto a flat, stable surface. Disconnect the black battery cable on the rear of the battery, then on the front of the battery. Disconnect the red battery cable on the rear of the battery. See “Recycling the Used Battery” on Page 20 for proper disposal.



4. **1500, 2000 and 2200VA units.** Pull the battery out onto a flat, stable surface. Press the black tab on the battery cable connector to disconnect the battery. See “Recycling the Used Battery” on Page 20 for proper disposal.



5. Install the new batteries in the reverse order of removal.

6. Reinstall the metal battery cover removed in Step 2. Replace the front panel.

Testing New Batteries

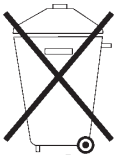
Press and hold the button for three seconds to initiate a self-test. After the test is finished, the indicator should turn off. If the indicator stays on, check the battery connections. Call your service representative if the problem persists.

Recycling the Used Battery

Contact your local recycling or hazardous waste centre for information on proper disposal of the used battery.

WARNING

- Do not dispose of the battery or batteries in a fire. Batteries may explode. Proper disposal of batteries is required. Refer to your local codes for disposal requirements.
- Do not open or mutilate the battery or batteries. Released electrolyte is harmful to the skin and eyes. It may be toxic.



CAUTION

Do not discard the UPS or the UPS batteries in the trash. This product contains sealed, lead-acid batteries and must be disposed of properly. For more information, contact your local recycling or hazardous waste centre.

6.0 Specifications

This section provides the following specifications for the Powerware 5125 models:

- Electrical input and output
- Mass and dimensions
- Environmental and safety
- Battery

Table 2. Model Specifications

Model Number	Power Levels (rated at nominal inputs)	Nominal Voltage	Input Voltage Range
PW5125 1000A	1000VA, 700W	240V	168-288V (-30%/+20%)
PW5125 1500A	1500VA, 1050W	240V	168-288V (-30%/+20%
PW5125 2000A	2000VA, 1600W	240V	16/-288V (-30%/+20%)
PW5125 2200A	2200VA, 1600W	240V	168-288V (-30%/+20%)

Table 3. Weights and Dimensions

	Dimensions (WxDxH)	Mass
1000VA Models	162 x 401 x 240 mm	15 kg
1500VA Models	162 x 467 x 250 mm	23 kg
2000VA Models	205 x 493 x 250 mm	31 kg
2200VA Models	205 x 493 x 250 mm	31 kg
Extended Battery Module	162 x 474 x 250 mm	27 kg

Table 4. Power Connections

	Input Connection	Output Receptacles
PW5125 1000A	10A, IEC-320 C14 input connector	4 x 10A Australian
PW5125 1500A	10A, IEC-320 C14 input connector	4 x 10A Australian
PW5125 2000A	10A, IEC-320 C14 input connector	6 x 10A Australian
PW5125 2200A	16A, IEC-320 C20 input connector	6 x 10A Australian

Table 5. Technical Specifications

Operating Frequency	50/60 Hz, auto-sensing
Frequency Range	46-65 Hz
Noise Filtering	MOVs and line filter for normal and common mode noise
Regulation (Normal Mode)	-10% to +6% of nominal voltage
Regulation (Battery Mode)	Nominal output voltage ±5%
Voltage Waveform	Sine wave

Table 6. Environment and Safety

Operating Temperature	10°C to 40°C (Optimal Battery Performance 25°C)
Storage Temperature	0°C to 25°C
Transit Temperature	-25°C to 55°C
Relative Humidity	5-95% non-condensing
Operating Altitude	Up to 3,000 metres above sea level
Transit Altitude	Up to 15,000 metres above sea level
Audible Noise	Less than 40dBA Normal mode, typical load, Less than 55dBA Battery Mode
Surge Suppression	ANSI C62.41 Category B (formerly IEEE 587), IEC 61000-4-6
Safety Conformance	UL 1778, UL 497A (data line only), CAN/CSA C22.2, No. 107.1, EN 50091-1-1 and IEC 60950, AS/NZS60950, EN50091-1
Agency Markings	C-Tick
EMC	EN 50091-2, AS/NZS 62040.2, AS/NZS61000.3.2

Table 7. Battery

Configuration	1000VA; (2) 24V, 9 Ah internal batteries 1500VA; (4) 48V, 7.2 Ah internal batteries 2000VA; (4) 48V, 12 Ah internal batteries 2200VA; (4) 48V, 12 Ah internal batteries
EBM Configuration	EBM-24; (8) 24V, 9 Ah batteries EBM-48; (8) 48V, 9 Ah batteries
Type	Sealed, maintenance free, valve regulated, lead-acid
Charging	Internal battery; less than 3 hours to 90% usable capacity at nominal after full load discharge External battery; recharging at 80% load or less is recommended, no more than 16x discharge time to 90% usable capacity at nominal line voltage after full load discharge; an external battery charger is recommended for faster recharge times when using more than 2 EBMs
Monitoring	Advanced monitoring for earlier failure detection and warning, auto detection of additional EBMs

Table 8. Battery Run Times (in Minutes at Full/Half Load)

Model	Internal UPS Batteries	1 EBM	2 EBM	3 EBM	4 EBM
1000VA;	5/14	25/60	55/170	83/199	109/228
1500VA;	6/17	33/79	63/146	92/174	120/201
2000VA;	5/16	29/67	62/190	91/222	119/251
2200VA;	5/14	26/60	55/170	81/198	106/224

NOTE Battery times are approximate and vary depending on the load configuration and battery charge

Powerware reserves the right to change specifications without prior notice.

7.0 Troubleshooting

If you have a question or problem, the troubleshooting table may help (See Table 9). If you need assistance, phone Powerware Service or your local Powerware office. Please have the model number and serial number (located on the rear of the unit) available.
If the unit must be returned, Powerware will give you a Return Authorisation (RA) number. Phone Powerware National Service & Repair Centre on 1300 303 059 for an RA number before returning the unit for any reason.

This section explains:

- UPS alarms and conditions
- How to silence an alarm
- Service and Support

Audible Alarms and UPS Conditions

The UPS has an audible alarm feature to alert you of potential power problems. Use Table 9 to determine and resolve the UPS alarms and conditions.

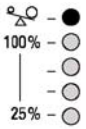
Silencing an Audible Alarm

To silence an alarm for an existing fault, press the button. If UPS status changes, the alarm beeps, overriding the previous alarm silencing. The alarm does not silence if there is a low battery condition.

Table 9. Troubleshooting Guide

Alarm or Condition	Possible Cause	Action
The ~ indicator is not on,. the UPS does not start	The power cord is not connected correctly.	Check the power cord connections.
	The wall outlet is faulty.	Have a qualified electrician test and repair the outlet.
The ~ indicator is flashing, power is not available at the UPS output receptacles.	The UPS is in Standby mode.	Press the On button to supply power to the connected equipment.
The UPS does not provide expected backup time.	The batteries need changing or service.	Plug the UPS into a power outlet for 24 hours to charge the battery. After charging the battery, press and hold the button for3 seconds, then check the indicator. If the indicator is still on, see “UPS Maintenance” on Page 16 to replace the battery.
	The self-test failed.	Plug the UPS into a power outlet for at least 3 hours to charge the battery. After charging the battery, press and hold the button for 3 seconds, the check the indicator. If the indicator is still on, see “UPS Maintenance” on Page 16 to replace the battery.
	UPS internal temperature is too high.	The UPS shuts down automatically in 10 seconds. Turn off and unplug the UPS. Clear vents and remove any heat sources. Ensure the airflow around the UPS is not restricted. Wait at least 5 minutes and restart the UPS. If the condition persists, contact your service representative.
1 beep every 4 seconds	UPS on battery.	The UPS is powering the equipment with battery power. Prepare your equipment for shutdown.
2 beeps every 2 seconds	The battery is running low.	3 minutes or less of battery power remains (depending on load configuration and battery charge). Save your work and turn off your equipment. The alarm cannot be silenced.

Table 9. Troubleshooting Guide (continued)

Alarm or Condition	Possible Cause	Action
	The UPS is running on battery power because the input voltage is too high or too low.	Correct the input voltage, if possible. The UPS continues to operate on battery until the condition is corrected or the battery is completely discharged. If the condition persists, the input voltage in your area may differ from the UPS nominal.
	The utility line voltage and frequency are out of specification	Have a qualified electrician check the wiring.
1 beep every 5 seconds	The battery may be fully discharged.	Plug the UPS into a power outlet for 24 hours to charge the battery. After charging the battery, press and hold the button for 3 seconds, then check the indicator. if the indicator is still on, see “UPS Maintenance” on Page 16 to replace the battery.
	The battery is not connected correctly	Check the battery connection. Call your service representative if the problem persists.
	Ground wire connection does not exist or the line and neutral wires are reversed in the wall outlet.	Have a qualified electrician correct the wiring.
	Power requirements exceed UPS capacity (101-110% for 3 minutes or 111-150% for 10 cycles) or the load is defective.	Turn off and unplug the UPS. Remove some of the equipment from the UPS. Wait at least 5 seconds until all LEDs are off and restart the UPS. You may need to obtain a larger capacity UPS.
	UPS fault condition.	Save your work and turn off your equipment. Turn off and unplug the UPS. Contact your service representative. The alarm cannot be silenced.

Service and Support

If you have a question or problem, Table 9, Troubleshooting Guide, may help. If you need more help, **please have your UPS model number and serial number (on the back label) nearby, and call the Powerware National Service and Repair Centre on 1300 303 059**

Powerware's service technicians have in-depth knowledge of the UPS and power problems.

Powerware may tell you the UPS must be returned. If this happens, we will give you a Return Authorisation (RA) number. **When you return a Powerware 5125 to the factory for any reason, please use the original packing material in which your unit was shipped to you. You may be responsible for repair charges for damaged units which are not packed in Powerware packing material.** If you have discarded the original packing material, please call the nearest Powerware office so that we can ship new packing material to you. If you have any questions, please feel free to call or fax the nearest Powerware office. Please do not return your Powerware 5125 without calling Powerware first. Powerware will advise you where to ship your Powerware 5125.

8.0. Warranty

WARRANTY Information

This Warranty is subject to Eaton Power Quality Pty Ltd (EPQ) standard Conditions of Sale which govern all sales of products by Eaton Power Quality Pty Ltd.

1. EPQ products, in general, are warranted against failure due to faulty materials and/or workmanship for a period of two years from despatch date (ex EPQ store) as per invoice. The Ferroresonant and 95 Series Power Conditioners and Dry Type Transformers have an extended warranty - 5 years from date of despatch.

2. If, within the applicable Warranty period, any EPQ product does not meet the warranty specified above, and the product was installed and operated in accordance with Australian standards and EPQ standard installation procedures, EPQ shall thereupon correct any defects due to faulty materials and/or workmanship.

3. Any modifications made to the product other than those made by EPQ or its authorised representative may cause the Warranty to be void.

4. For units up to 3kVA that are installed as a portable device, the Warranty covers repair or replacement of defective parts at the factory, or other service locations as nominated by EPQ, provided the unit has been returned by the user packed adequately to prevent shipping damage, and approval has been obtained from EPQ before shipment. All costs associated with the return of the product to EPQ are at the customer's expense.

   For hardwired products 3kVA and above, the Warranty covers on site repair (Metropolitan area, Capital Cities only) during normal working hours, by EPQ technicians or appointed agents. For units installed in remote locations, EPQ may, at its discretion, request the equipment to be recovered and returned to the factory or other nominated service locations. In this case, it is the customer's responsibility to pack the equipment adequately to prevent shipping damages and pay freight charges to the location nominated by EPQ. Approval to return goods must be obtained from EPQ before the goods are despatched.

5. Units returned for in-warranty repairs, which are found not to be defective, will be subject to an inspection and handling charge, plus transportation charges.
6. High grade batteries, designated for Uninterruptible Power Supply (UPS) applications, are supplied by EPQ for use with EPQ UPS equipment. These batteries have a finite life expectancy depending on a number of variables, including rate of discharge, depth of discharge, operating temperature, etc.

7. Providing that the batteries are used within the limits as set out in the battery manufacturer's warranty statement and are provided as an integral part of new equipment, they are guaranteed for two years, from despatch date as per invoice. A copy of this warranty statement is available on request. Batteries provided as spare parts or replacements have a one year warranty. Other optional warranty terms for batteries are available on request.
8. EPQ reserves the right to charge for replacement batteries if within the one year guarantee period replacement batteries are necessary as a result of misuse or misapplication by the purchaser or end user.

AFFIX
POSTAGE
STAMP

Eaton Power Quality Pty Ltd
13 Healey Road
DANDENONG VIC 3175
AUSTRALIA

Standard Warranty Registration

POWERWARE

UPS Model Number: ..... UPS Serial Number: ..... Date of Purchase: ...../...../.....

Contact Person: .....

Company/Organisation: .....

Address: .....

City: ..... State: ..... Country: ..... Postcode: .....

Telephone: ..... Fax: ..... E-mail: .....

1. Where did you purchase this Powerware UPS from?
   ❑Retail Store ❑Computer Store ❑Powerware Distributor ❑Direct from Powerware
   ❑Electrical Wholesaler ❑Mail Order Catalogue ❑Internet ❑Other .....
2. Why did you purchase a Powerware UPS? (Check all that apply)
   ❑Recommendation ❑Reputation ❑After Purchase Support ❑Features
   ❑Price ❑Other .....
3. What price did you pay for this Powerware UPS? .....
4. What features of a UPS are important to you?
   ❑Appearance ❑Front Panel Display ❑Backup Time ❑RS232
   Communications ❑UPS Management Software ❑Other .....
5. What equipment do you intend to protect with this Powerware UPS?
   ❑Personal Computer(s) ❑Workstation(s) ❑Service/Network Equip.
   ❑Midrange Computer(s) ❑Mainframe(s) ❑Industrial Automation
   ❑Telecommunications Equipment ❑Retail/Point-of-Sale Equipment ❑Facilities/
   Building wide protection ❑Other .....
6. Please specify the equipment being protected by your Powerware UPS?
   Brand.....Model ..... Operating System .....
7. How would you classify your type of business?
   ❑Retail ❑Wholesale/Distribution ❑Manufacturing ❑Telecommunications
   ❑Government/Eduction ❑Banking/Finance ❑Restaurant/Hotel ❑Other .....
8. What is your company's annual revenue?
   ❑Less than $1m ❑$1m-5$m ❑$5m-$20m ❑$20m-$100m ❑Greater than $100m
9. Approximately how many personal computers are there in your company?
   ❑Less than 10 ❑10-20 ❑20-50 ❑50-200 ❑Greater than 200
10. Do you plan to purchase more UPS or Power Protection products?
    ❑ Within 1 month ❑1-6 months ❑6-12 months ❑Unlikely
11. Would you like information about Eaon Power Quality Extended Warranty ?
    ❑Yes ❑No
12. Would you like to be kept informed about new Powerware product developments and be added to our customer service database?
    ❑Yes (you will receive mail from Powerware at least three (3) times per year) ❑No

9.0 Configuration

This section describes how to reconfigure the input voltage of the PW5125 UPS:

Configuration Mode

When the UPS is in Configuration mode. the front panel LEDs represent the configuration options. The control buttons (Configuration button, On button, Off button and Alarm Reset button) are used to modify the UPS configuration. Figure 14 shows the indicators and Table 10 explains the corresponding options.

1. Remove the front plastic cover - refer Page 18 for instructions. Press the Configuration mode button until the green configuration LED is On. The indicators flash briefly and then display the enabled option.

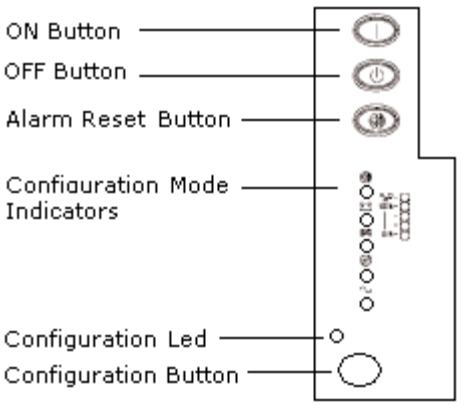
2. Press the On button to scroll through the options. Each time you press the button, the UPS beeps. The indicator for the selected option indicates the current setting; flashing represents a selected but as yet disabled option.

3. Press the Off button once to toggle the selected option ON (this will cause the flashing indicator to go solid and the original selected option LED to go out.

4. Press the Alarm Reset button until the green Configuration LED goes out.

WARNING

- The UPS exits the Configuration mode automatically after two (2) minutes causing the green Configuration LED to go out.



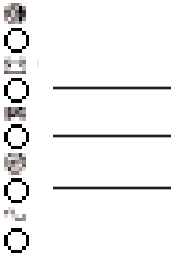
1. Remove the front plastic cover - refer Page 18 for instructions. Press the Configuration mode button until the green configuration LED is On.

2. Press the On button to scroll to the next option.

3. Press the Off button to toggle the option ON.

4. Press the Alarm Reset button to save the setting and exit Configuration mode.

Figure 14 Using the Configuration Mode

Parameter (LED)	Parameter Name	LED Status	Explanation
	220 Nom	ON	Nominal utility voltage is 220VAC
	230 Nom	ON	Nominal utility voltage is 230VAC
	240 Nom	ON	Nominal utility voltage is 240VAC

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Fax: 03-9794-9150

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Balcatta WA 6021
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Fax: 08-9240-5644

Sydney
119-127 Wicks Road
North Ryde NSW 2113
Phone: 02-9878-5000
Fax: 02-9887-2186

Auckland
PO Box 39-572
Howick
Auckland New Zealand 1706
Phone: 09-5353 084
Fax: 09-5353 083

You have purchased a UPS that will provide you with many years of service, protecting your equipment from surges, sags, and blackouts. This product incorporates the highest quality standards in engineering, manufacturing and testing, and carries a 2 year warranty against defects in material and workmanship. This product is backed by over 60 years of pride and integrity. We are sure you will agree, there is no substitute for a Powerware product.

Did you know that Powerware also makes:

- Single Phase UPS systems up to 15kVA
- Three Phase UPS systems to 700kVA
- Parallel Three Phase UPS Systems to 1MVA
- Plug in Power Conditioners to 3kVA
- Hardwired Single Phase Power Conditioners to 22.5kVA
- Constant Voltage Transformers to 7.5kVA
- AC/DC switching and linear Power Supplies
- CVDC Constant Voltage Ferroresonant Power Supplies
- Low Voltage General Purpose Transformers
- Industrial Control Transformers
- Telecommunications DC Systems

Powerware products are available through an extensive distribution network. These distributors offer literature, technical assistance, and a wide array of off-the-shelf products for the fastest possible delivery. In addition, Powerware field sales offices are conveniently located to provide prompt attention to customer needs. Call Powerware direct to find the location of your closest authorised distributor.

Powerware: Worldwide Manufacturers of Power Protection, Conversion and Transformation Products